Inventors: Wood et al.

Serial No. 09/813858

PATENT APPLICATION

Navy Case No. 79,849

IN THE DRAWINGS:

Figure 11a has been amended to delete the reference sign 600 which is not mentioned in

the text. (Drawing attached)

THE ABSTRACT

A newly drafted abstract is presented below.

ABSTRACT

A fast photon detector with high energy and position resolution, which may be used in the

infrared, ultraviolet, EUV, and X-ray ranges includes an absorber, a thermoelectric sensor, a heat

sink, all disposed on a dielectric substrate. An absorber receives a photon and transforms the

energy of the photon into a change in temperature within the absorber. A thermoelectric sensor

is thermally coupled to the absorber. When the absorber receives the photon, the energy of the

photon is very quickly transformed into a time dependent temperature difference across the

sensor. A heat sink is thermally coupled to the sensor, to maintain the heat flow across the

sensor. The absorber, sensor, and heat sink are disposed upon a dielectric substrate, such that the

heat transfer from the sensor to the dielectric substrate is much slower than the signal duration.